

## ABSTRACT

A signal detector system (10) comprises a single signal detector (11) having a limited on-time during which any received electromagnetic signal can be assessed. The signal detector (11) receives electromagnetic signals from a single direction in space (D) through a single optical fibre (12), a signal splitter 13 which splits the collected signal between three optical paths (20, 30 and 40), and a signal combiner (14) which combines the portions of the signal transmitted by the three optical paths (20, 30 and 40) and transmits the combined signal to a 10 signal detector input (15). Each of the optical paths (20, 30 and 40) includes a respective optical delay (21, 31 and 41) designed to delay transmission of any received signal towards the signal detector (11). In this manner the signal detector (11) will receive any signals that arrived at the optical fibre (12) during three separate periods of time.